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Gain of 1q predicts poor survival in patients with medulloblastoma

Prognostic risk factors in medulloblastoma include age, evidence of metastasis at diagnosis, and residual tumor after resection; however, these clinical parameters cannot sufficiently define disease risk. Recent data from Lo *et al.* suggest that gain of the chromosome arm 1q is prognostic for poor survival in patients with medulloblastoma.

The study included 49 medulloblastoma samples, which were analyzed by array-based comparative genomic hybridization in order to identify any correlation between abnormalities in karyotype copy number and overall survival. Log-rank analysis showed that loss of the 4q, 7p and 18q and gain of the 1q chromosome arms were significantly associated with poor survival (P = 0.02503, P = 0.00107, P = 0.02503and P = 0.00004, respectively). In contrast to 4g, 7p and 18g losses, which occurred at low frequency, gain of 1q was found to be a more frequent event, occurring in 9 of the 49 samples. A permutated log-rank test also showed that gain of 1q was significantly associated with poor survival (P<0.0001). At 39 months' follow-up, 20% and 80% of patients with or without 1q gain, respectively, were alive. Logrank analysis and analysis with a Cox proportional hazards model did not identify any significant correlations between survival and age at diagnosis or presence of metastasis at presentation.

These data suggest that gain of 1q is the factor most strongly predictive of overall survival in patients with medulloblastoma.

Original article Lo KC *et al.* (2007) Gain of 1q is a potential univariate negative prognostic marker for survival in medulloblastoma. *Clin Cancer Res* **13:** 7022–7028

CT scans do not improve response assessment for chronic lymphocytic leukemia

The 1996 National Cancer Institute-sponsored Working Group (NCI-WG) response criteria for chronic lymphocytic leukemia (CLL) specify performance of a complete blood count, physical examination and bone marrow evaluation, but they do not recommend CT scans as standard. CT scans are incorporated into the response criteria of other hematologic

malignancies such as non-Hodgkin's lymphoma (NHL), but the benefit of CT-measured lymph node response in predicting patient outcomes in CLL remains unclear.

A retrospective study by Blum et al. has compared the response determinations of the NCI-WG CLL criteria with those of the NHL-CT response criteria, in 82 patients with CLL treated at Ohio State University. The NCI-WG CLL criteria identified 5 complete responses. 32 partial responses, 21 cases of stable disease, and 17 cases of progressive disease. The NHL-CT criteria documented 3 patients with complete response, 16 patients with partial response, 26 patients with stable disease, and 17 patients with progressive disease. The progression-free survival times (PFSs) of patients classified as having complete or partial responses according to the NCI-WG criteria were 27.3 months and 11.4 months, respectively, whereas patients classified as having a complete or partial response in accordance with NHL-CT criteria had PFSs of 18.4 months and 14.5 months, respectively.

By log-rank test, NCI-WG CLL response significantly correlated with PFS and overall survival (P<0.001 and P=0.012, respectively). NHL-CT response also correlated with PFS and overall survival (P<0.001 for both). In multivariate analysis, both NCI-WG CLL and NHL-CT response significantly predicted PFS (P=0.009 and P=0.001, respectively). These data do not demonstrate any additional benefit from the use of CT scans in response evaluation of patients with CLL.

Original article Blum KA *et al.* (2007) Computed tomography scans do not improve the predictive power of 1996 National Cancer Institute-sponsored Working Group chronic lymphocytic leukemia response criteria. *J Clin Oncol* **25:** 5624–5629

Successful treatment of multifocal DCIS with breast-conserving surgery and radiotherapy

Concerns over disease recurrence after breast-conserving surgery in women with multifocal ductal carcinoma *in situ* (DCIS) have resulted in many of these women receiving mastectomy. Yet, it is currently unclear whether multifocality increases the risk of disease recurrence following breast-conserving surgery. Rakovitch *et al.* examined the outcomes of 615 patients treated